PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
B28B 7/14, B29C 51/00, B65D 1/00

A1

(11) International Publication Number: **WO 97/33735**

(43) International Publication Date: 18 September 1997 (18.09.97)

(21) International Application Number: PCT/US97/04130

(22) International Filing Date: 14 March 1997 (14.03.97)

(30) Priority Data:
08/619,810 15 March 1996 (15.03.96) US

(71) Applicant: SENCORP SYSTEMS, INC. [US/US]; 400 Kidds Hill Road, Hyannis, MA 02601 (US).

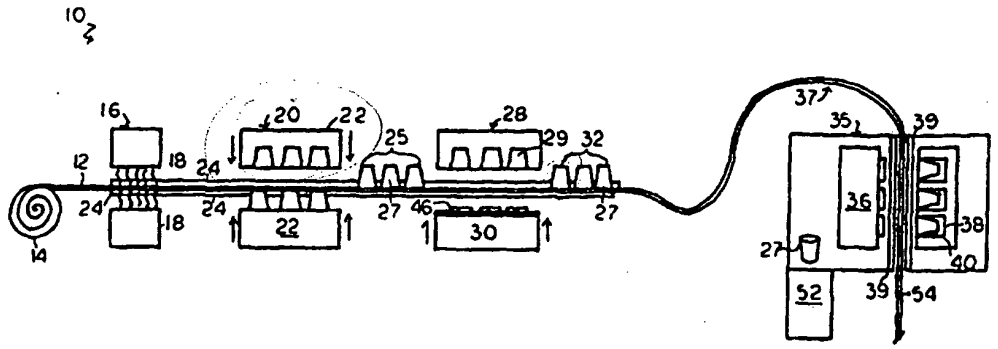
(72) Inventors: GIOVANNONE, Anthony; 362 Wianno Avenue, Osterville, MA 02655 (US). MITCHELL, David, C.; 109 Allan Road, West Barnstable, MA 02668 (US).

(74) Agent: CROWLEY, Richard, P.; 901 Main Street, P.O. Box 901, Osterville, MA 02655-0901 (US).

(81) Designated States: CA, JP, MX, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: PRECUT APPARATUS AND THERMOFORMING MOLDING METHOD AND SYSTEM



(57) Abstract

The invention relates to a precut die apparatus (30) arranged and adapted for use in a thermoform-trimming method and system (10) to produce plastic molded articles (27), and to the method and system (10) in which the apparatus (30) is employed. The precut apparatus (30) is positioned, in the method and system (10), between the form press (22) and the trim station (35). The precut apparatus (30) is arranged to precut, in a desired and selected manner, the thermoformed sheet material (12) containing thermoformed articles (27) therein, about the periphery of the thermoformed articles (27). The precut apparatus (30) provides for a bridged and joining area of the sheet material (12) to allow for slight movement and adjusting of the molded articles (27) for precise alignment in the punch and die trim step for the thermoforming and trimming operation.